

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method comprising:  
determining, at a first device, a power save status of a first station second device wherein ~~said first station communicates via a shared communications channel in a wireless local area network in accordance with a first modulation scheme;~~ and  
responsive to a determination that the first station second device is not in a power save state,
  - (i) enabling transmission protection at ~~[[a]]~~ the first second station device; and
  - (ii) ~~from the second station;~~ transmitting, from the first device, a message ~~via the shared communications channel~~ requesting that a third station device enable transmission protection.
2. (Currently Amended) The method of claim 1, wherein determining ~~[[a]]~~ the power save status of ~~a first station~~ the second device comprises:  
transmitting one of a Request-to-Send frame, a Data frame, and a Null frame to the first station second device ~~via the shared communications channel in accordance with the first modulation scheme;~~ and  
receiving one of an Acknowledgement frame and a Clear-to-Send frame from the first station second device.
3. (Currently Amended) The method of claim 1, wherein transmitting ~~[[a]]~~ the message ~~via the shared communications channel~~ requesting that ~~[[a]]~~ the third station device enable transmission protection comprises broadcasting a management frame ~~via the shared communications channel~~.
4. (Currently Amended) The method of claim 3, wherein the management frame is one of:

- (i) a Beacon frame indicating that protection status is active; and
- (ii) a Probe-Response frame indicating that protection status is active.

5. (Currently Amended) The method of claim 1, wherein the ~~first modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation~~ second device is configured to communicate in accordance with a first modulation scheme, and the first and third devices are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

6. (Currently Amended) A method comprising:  
receiving, at a first device, a first frame from a ~~first station~~ second device via a shared-  
~~communications channel in a wireless local area network wherein the first station communicates~~  
~~in accordance with a first modulation scheme; and~~

~~determining whether the first station is in power save mode;~~

in response to receiving the first frame from the ~~first station~~ second device,

- (i) ~~enabling transmission protection at a second station~~ the first device; and
- (ii) ~~broadcasting from the second station~~ first device an IEEE 802.11 Probe-Response frame via the shared communications channel a message requesting that a third device enable transmission protection;

~~wherein said IEEE 802.11 Probe-Response frame indicates that transmission protection status is active.~~

7. (Currently Amended) The method of claim 6, wherein the ~~first modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation~~ second device is configured to communicate in accordance with a first modulation scheme, and the first and third devices are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

8. (Currently Amended) A method comprising:

transmitting, from a first device, a first message requesting that a second device enable transmission protection and a second message requesting that the second device disable transmission protection, wherein the first message and the second message are continuously transmitted in an alternating pattern, and wherein a time period separates the transmission of the first message and the transmission of the second message; and

in response to receiving a message from a third device at the first device, adjusting the time period separating the transmission of the first message and the second message,

determining a power save status of a first station that communicates via a shared-communications channel in a wireless local area network in accordance with a first modulation scheme;

responsive to determining the power save status of the first station, alternately enabling and disabling transmission protection at a second station, wherein the second station is configured to communicate via the shared communications channel in accordance with the first modulation scheme and a second modulation scheme; and

transmitting a message from the second station via the shared communications channel indicating a transmission protection status of the second station;

wherein the second modulation scheme is undetectable to the first station that communicates via the shared communications channel in accordance with the first modulation scheme; and

wherein the first modulation scheme and the second modulation scheme are different from each other.

9. (Currently Amended) The method of claim 8, wherein, if the most recent message sent from the first device to the second device is the second message, adjusting the time period comprises reducing the amount of time until transmission of the first message the enabling of transmission protection and the disabling of transmission protection are periodic with respect to one of (i) frames transmitted and (ii) time.

10. (Currently Amended) The method of claim 8, wherein if the most recent message sent from the first device to the second device is the first message, adjusting the time period comprises increasing the amount of time until transmission of the second message the of transmission protection and the disabling of transmission protection are sporadic with respect to one of (i) frames transmitted and (ii) time.

11. (Currently Amended) The method of claim 8, wherein the first message is a Beacon frame or a Probe-Response frame further comprising extending transmission protection for a first interval when receiving a first frame from the first station while transmission protection is enabled, wherein the first interval is measured in one of (i) time and (ii) frames.

12. (Currently Amended) The method of claim 8, wherein the message received from the third device is a legacy modulation frame further comprising activating transmission protection for a first interval when receiving a first frame from the first station while transmission protection is disabled, wherein said first interval is measured in one of (i) time and (ii) frames.

13. (Currently Amended) The method of claim 8, wherein the first device is an access point transmitting a message from the second station via the shared communications channel indicating a transmission protection status of the second station comprises transmitting a first management frame via said shared communications channel.

14. (Currently Amended) The method of claim [[13]] 8, wherein the third device is configured to communicate in accordance with a first modulation scheme, and the device and second device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme first management frame is one of: (i) a Beacon frame indicating that protection status is active; and (ii) a Probe-Response frame indicating that protection status is active.

15. (Currently Amended) The method of claim [[8:]] 14,

wherein the first modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation; and

wherein the second modulation scheme is based on Orthogonal Frequency Division Multiplexing modulation.

16. (Currently Amended) A method comprising:

transmitting from a first ~~station~~ device a first frame comprising a duration field with a value to a second ~~station~~ device via a shared-communications channel in a wireless local area network in accordance with a first modulation scheme; and

receiving at the first ~~station~~ device a second frame from a third ~~station~~ device via the shared-communications channel in accordance with a second modulation scheme during a time interval defined by the ~~duration-field~~ value~~[[:]]~~<sub>1</sub>

~~determining whether the third station is in power save mode; and~~

~~receiving at the first station a third frame via the shared-communications channel in accordance with said first modulation scheme after the time interval;~~

wherein the first modulation scheme is undetectable to the third ~~station~~ device ~~[[:]]~~<sub>1</sub> and

wherein the first modulation scheme and the second modulation scheme are different from each other.

17. (Previously Presented) The method of claim 16:

wherein the first modulation scheme is based on Orthogonal Frequency Division Multiplexing modulation; and

wherein the second modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation.

18. (Currently Amended) The method of claim 16, wherein the transmitting is one of (i) periodic and (ii) sporadic.

19. (Currently Amended) The method of claim 16, wherein the first frame further comprises instructions to refrain from transmitting frames for a time interval.

20. (Currently Amended) A device ~~An apparatus~~ comprising:  
a memory comprising a computer-readable program; and  
a processor operably coupled to the memory and configured to execute the computer-readable program to cause the device to  
determine for determining a power save status of a first station second device  
wherein ~~the first station communicates via a shared communications channel in a wireless local area network in accordance with a first modulation schemes, and~~  
in response to a determination that ~~determining a power save status of the first station~~ second device is not in a power save state,

(i) enable enabling transmission protection at ~~a second station~~ the device;  
and

(ii) transmit, from the device, a message requesting that a third device  
enable a transmitter for enabling transmission protection at ~~a third station via the shared-~~  
~~communications channel wherein the enabling of transmission protection at the third station is~~  
~~responsive to a determination of the power save status of the first station.~~

21. (Currently Amended) The ~~apparatus~~ device of claim 20, wherein the device  
enables enabling of transmission protection at the third station device by comprises broadcasting  
a management frame via the shared-communications channel.

22. (Currently Amended) The ~~apparatus~~ device of claim 21, wherein the management  
frame is one of:

- (i) a Beacon frame indicating that protection status is active; and
- (ii) a Probe-Response frame indicating that protection status is active.

23. (Currently Amended) The ~~apparatus~~ device of claim [[21]] 20, wherein the ~~first~~  
~~modulation scheme is based on one of Barker modulation and Complementary Code Keying~~

~~modulation~~ second device is configured to communicate in accordance with a first modulation scheme, and the device and third device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

24. (Currently Amended) ~~A device~~ An apparatus comprising:  
a memory comprising a computer-readable program; and  
a processor operably coupled to the memory and configured to execute the computer-readable program to cause the device to

~~a receiver configured to receive a first frame from a first station~~ second device via a shared communications channel in a wireless local area network wherein the first station communicates in accordance with a first modulation scheme and wherein the receiver is configured to determine whether the first station is in power save mode; and

in response to receiving the first frame from the second device,

(i) enable transmission protection at the device; and

(ii) broadcast a message requesting that a third device enable transmission protection ~~a transmitter configured to communicate via the shared communications channel in accordance with the first modulation scheme and a second modulation scheme and configured to broadcast an IEEE 802.11 Probe Response frame via the shared communications channel in response to determining whether the first station is in power save mode;~~

~~wherein the IEEE 802.11 Probe Response frame indicates that a transmission protection status is active.~~

25. (Currently Amended) ~~The apparatus of claim 24, wherein the first modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation~~ second device is configured to communicate in accordance with a first modulation scheme, and the device and third device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

26. (Currently Amended) ~~A device~~ An apparatus comprising:  
a memory comprising a computer-readable program; and

a processor operably coupled to the memory and configured to execute the computer-readable program to cause the device to

transmit a first message requesting that a second device enable transmission protection and a second message requesting that the second device disable transmission protection, wherein the first message and the second message are continuously transmitted in an alternating pattern, and wherein a time period separates the transmission of the first message and the transmission of the second message; and

in response to receiving a message from a third device, adjust the time period separating the transmission of the first message and the second message.

a receiver for receiving in accordance with a first modulation scheme and a second modulation scheme via a shared communications channel in a wireless communication network; and

a transmitter for alternately enabling and disabling transmission protection at a first station and at the apparatus responsive to determining that a second station is in power save mode, wherein the second station communicates via the shared communications channel in accordance with the first modulation scheme;

wherein the first modulation scheme is undetectable to the second station that communicates via the shared communications channel in accordance with a second modulation scheme; and

wherein the first modulation scheme and the second modulation scheme are different from each other.

27. (Currently Amended) The apparatus device of claim 26, wherein, if the most recent message sent to the second device is the second message, the device adjusts the time period by reducing the amount of time until transmission of the first message the enabling of transmission protection and the disabling of transmission protection are periodic with respect to one of (i) frames transmitted and (ii) time.



28. (Currently Amended) The apparatus device of claim 26, wherein, if the most recent message sent from the first device to the second device is the first message, the device adjusts the time period by increasing the amount of time until transmission of the second message the enabling of transmission protection and the disabling of transmission protection are sporadic with respect to one of (i) frames transmitted and (ii) time.

29. (Currently Amended) The apparatus device of claim 26, wherein the first message is a Beacon frame or a Probe-Response frame further comprising extending transmission protection for a first interval when receiving a first frame from the second station while transmission protection is enabled, wherein the first interval is measured in one of (i) time and (ii) frames.

30. (Currently Amended) The apparatus device of claim 26, wherein the message received from the third device is a legacy modulation frame further comprising activating protection for a first interval in response to receiving a first frame from the second station while transmission protection is disabled, wherein the first interval is measured in one of (i) time and (ii) frames.

31. (Currently Amended) The apparatus device of claim 26, wherein the device is an access point enabling of transmission protection comprises transmitting a first management frame via the shared communications channel.

32. (Currently Amended) The apparatus device of claim [[31]] 26, wherein the third device is configured to communicate in accordance with a first modulation scheme, and the device and second device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme first management frame is one of: (i) a Beacon frame indicating that protection status is active; and (ii) a Probe-Response frame indicating that protection status is active.

33. (Currently Amended) The apparatus device of claim [[26:]] 33,

wherein the first modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation; and  
wherein the second modulation scheme is based on Orthogonal Frequency Division Multiplexing modulation.

34. (Currently Amended) ~~A device~~ An apparatus comprising:  
a memory comprising a computer-readable program; and  
a processor operably coupled to the memory and configured to execute the computer-readable program to cause the device to  
transmit ~~a transmitter for transmitting~~ a first frame comprising a duration field with a value to a second first station device via a shared-communications channel in a wireless local area network in accordance with a first modulation scheme ~~and for determining whether a second station is in power save mode; and~~  
~~a receiver for:~~  
receive ~~receiving~~ a second frame from ~~the second station~~ a third device via the shared-communications channel in accordance with a second modulation scheme during a time interval defined by the ~~duration field value; and,~~  
~~receiving a third frame via the shared-communications channel in accordance with the first modulation scheme after the time interval; and~~  
~~a processor for enabling transmission protection at the transmitter;~~  
wherein the first modulation scheme is undetectable to the ~~second station~~  
third device [[:]], and  
wherein the first modulation scheme and the second modulation scheme are different from each other.

35. (Currently Amended) The ~~apparatus~~ device of claim 34:  
wherein the first modulation scheme is based on Orthogonal Frequency Division Multiplexing modulation; and  
wherein the second modulation scheme is based on one of Barker modulation and

Complementary Code Keying modulation.

36. (Currently Amended) The ~~apparatus~~ device of claim 34, wherein the transmitting is one of (i) periodic and (ii) sporadic.

37. (Currently Amended) The ~~apparatus~~ device of claim 34, wherein the first frame further comprises instructions to refrain from transmitting frames for a time interval.

38. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a device, cause the device to perform operations comprising:

determining a power save status of a second device, and

in response to a determination that the second device is not in a power save state,

(i) enabling transmission protection at the device; and

(ii) transmitting, from the device, a message requesting that a third device enable transmission protection.

39. (New) The article of manufacture of claim 38, wherein the device enables transmission protection at the third device by broadcasting a management frame via the shared-communications channel.

40. (New) The article of manufacture of claim 39, wherein the management frame is one of:

(i) a Beacon frame indicating that protection status is active; and

(ii) a Probe-Response frame indicating that protection status is active.

41. (New) The article of manufacture of claim 38, wherein the second device is configured to communicate in accordance with a first modulation scheme, and the device and

third device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

42. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a device, cause the device to perform operations comprising:

receiving a first frame from a second device; and  
in response to receiving the first frame from the second device,  
(i) enabling transmission protection at the device; and  
(ii) broadcasting a message requesting that a third device enable  
transmission protection.

43. (New) The article of manufacture of claim 42, wherein the second device is configured to communicate in accordance with a first modulation scheme, and the device and third device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

44. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a device, cause the device to perform operations comprising:

transmitting a first message requesting that a second device enable transmission protection and a second message requesting that the second device disable transmission protection, wherein the first message and the second message are continuously transmitted in an alternating pattern, and wherein a time period separates the transmission of the first message and the transmission of the second message; and

in response to receiving a message from a third device, adjusting the time period separating the transmission of the first message and the second message.

45. (New) The article of manufacture of claim 44, wherein, if the most recent message sent to the second device is the second message, adjusting the time period includes reducing the amount of time until transmission of the first message.

46. (New) The article of manufacture of claim 44, wherein, if the most recent message sent from the first device to the second device is the first message, adjusting the time period includes increasing the amount of time until transmission of the second message.

47. (New) The article of manufacture of claim 44, wherein the first message is a Beacon frame or a Probe-Response frame.

48. (New) The article of manufacture of claim 44, wherein the message received from the third device is a legacy modulation frame.

49. (New) The article of manufacture of claim 44, wherein the third device is configured to communicate in accordance with a first modulation scheme, and the device and second device are configured to communicate in accordance with the first modulation scheme and a second modulation scheme.

50. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a device, cause the device to perform operations comprising:

transmitting a first frame comprising a duration field with a value to a second device via a shared-communications channel in a wireless local area network in accordance with a first modulation scheme; and

receiving a second frame from the third device via the shared-communications channel in accordance with a second modulation scheme during a time interval defined by the value, wherein the first modulation scheme is undetectable to the third device, and wherein the first modulation scheme and the second modulation scheme are different from each other.

51. (New) The article of manufacture of claim 50:  
wherein the first modulation scheme is based on Orthogonal Frequency Division Multiplexing modulation; and  
wherein the second modulation scheme is based on one of Barker modulation and Complementary Code Keying modulation.
52. (New) The article of manufacture of claim 50, wherein the transmitting is one of (i) periodic and (ii) sporadic.
53. (New) The article of manufacture of claim 50, wherein the first frame further comprises instructions to refrain from transmitting frames for a time interval.